

CONTROLLED HEAT TRANSFER WITH MAMMALIAN BODIES

ABSTRACT

Methods, computer programming and devices for transferring heat to and/or from a body portion of a mammal are provided. One approach includes directly determining a state of vasoconstriction or vasodilation in a portion of a body, and supplying heat to the portion of the body when vasoconstriction is determined, and removing heat from the portion of the body when vasodilation is determined. The body portion preferably includes specific heat exchange vasculature. In another approach, a transition of the body portion from a state of vasodilation to vasoconstriction is determined and the body portion is then actively kept in a state of vasodilation while removing heat therefrom.